



STATE OF MARYLAND

DMMH

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October 16, 2009

Public Health & Emergency Preparedness Bulletin: # 2009:40 Reporting for the week ending 10/10/09 (MMWR Week #40)

CURRENT HOMELAND SECURITY THREAT LEVELS

National: Yellow (ELEVATED) *The threat level in the airline sector is Orange (HIGH)
Maryland: Yellow (ELEVATED)

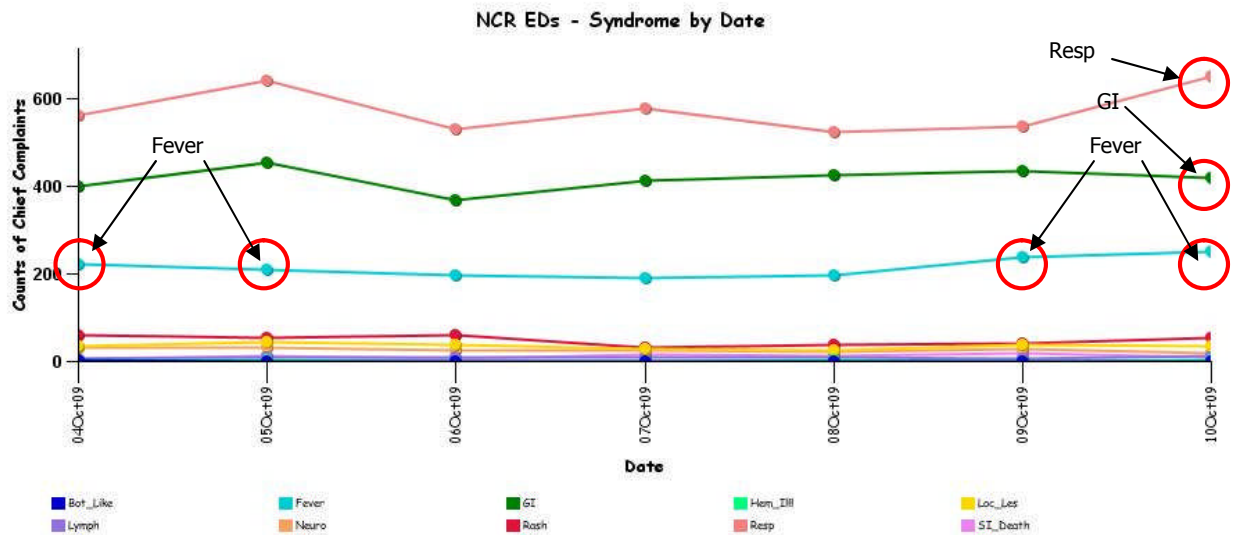
SYNDROMIC SURVEILLANCE REPORTS

ESSENCE (Electronic Surveillance System for the Early Notification of Community-based Epidemics):

Graphical representation is provided for all syndromes, excluding the "Other" category, all age groups, and red alerts are circled.

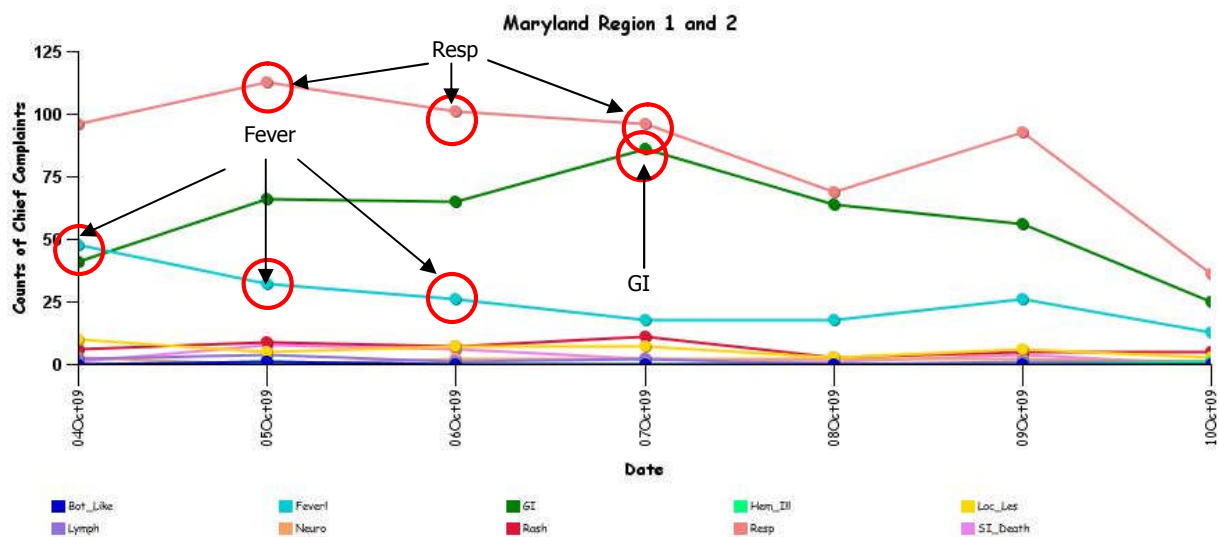
Note: ESSENCE – ANCR Spring 2006 (v 1.3) now uses syndrome categories consistent with CDC definitions.

Overall, no suspicious patterns of illness were identified. Track backs to the health care facilities yielded no suspicious patterns of illness.

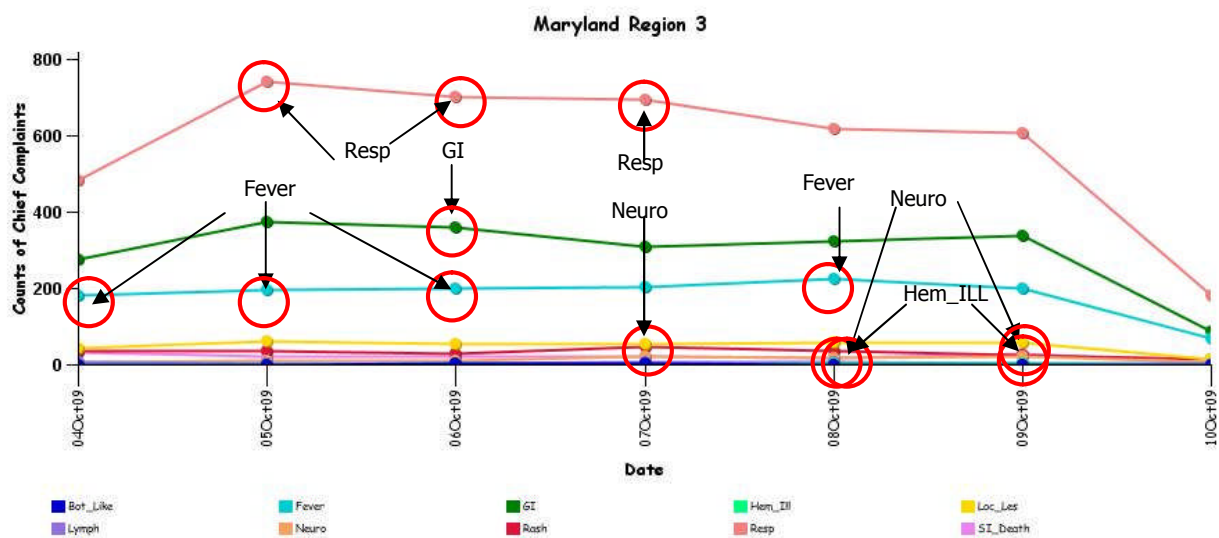


* Includes EDs in all jurisdictions in the NCR (MD, VA, and DC) reporting to ESSENCE

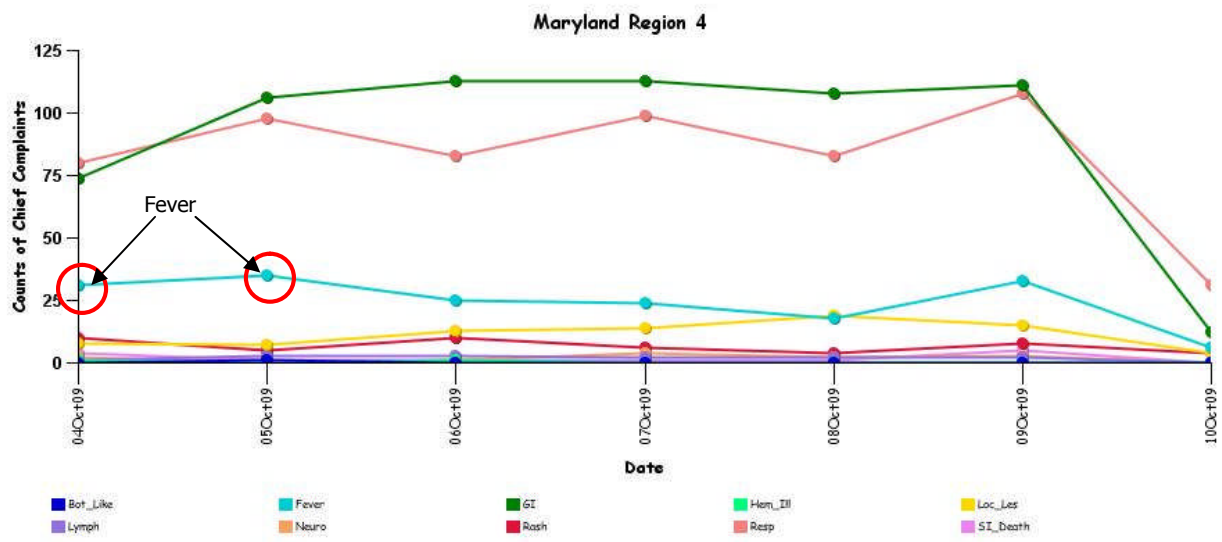
MARYLAND ESSENCE:



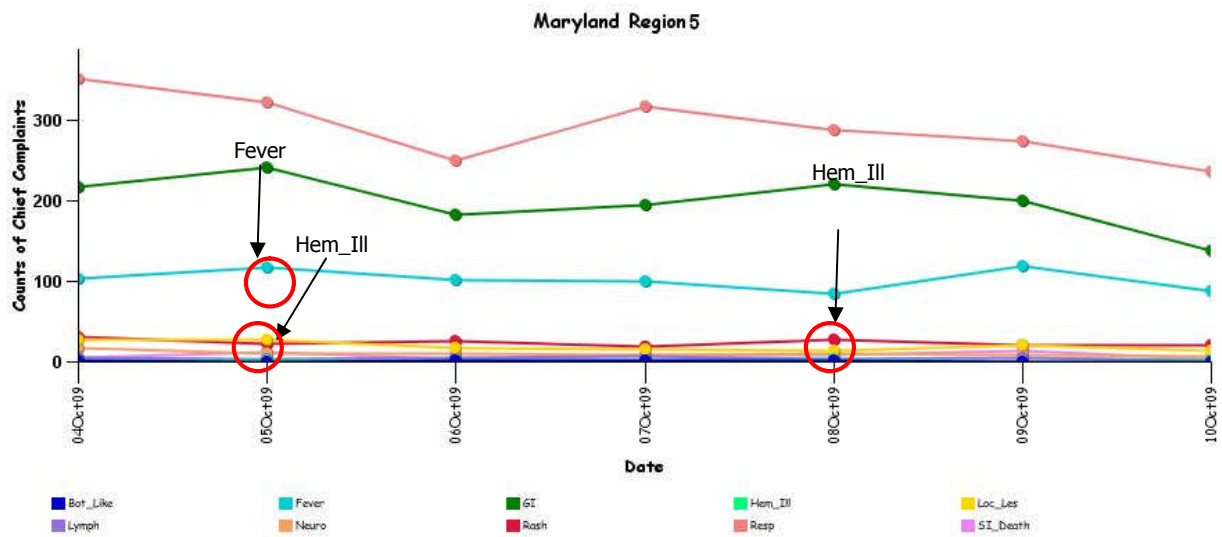
* Region 1 and 2 includes EDs in Allegany, Frederick, Garrett, and Washington counties reporting to ESSENCE



* Region 3 includes EDs in Anne Arundel, Baltimore city, Baltimore, Carroll, Harford, and Howard counties reporting to ESSENCE

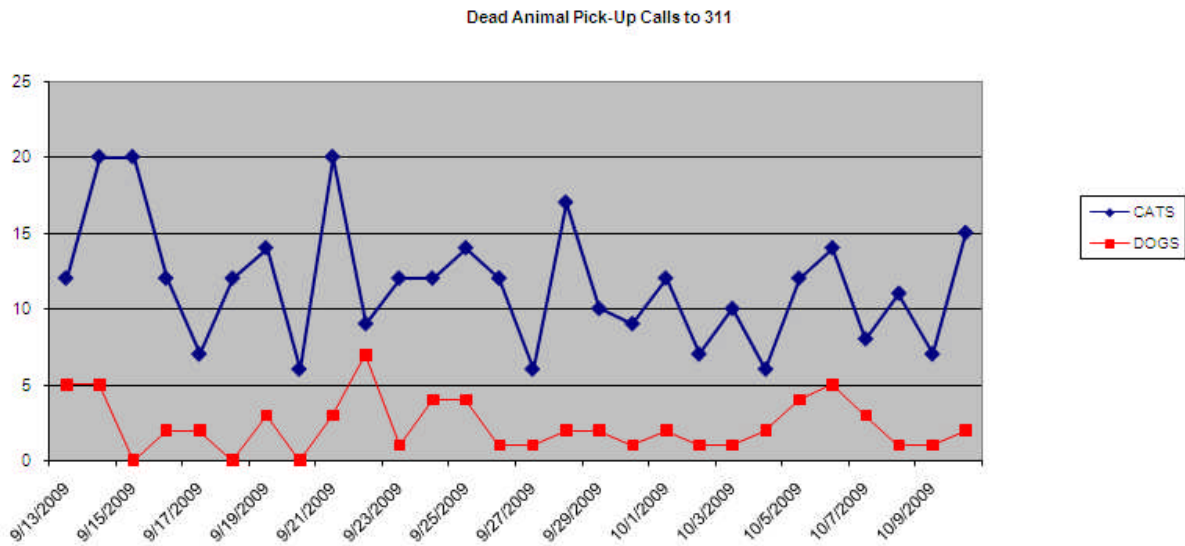


* Region 4 includes EDs in Cecil, Dorchester, Kent, Somerset, Talbot, Wicomico, and Worcester counties reporting to ESSENCE



* Region 5 includes EDs in Calvert, Charles, Montgomery, Prince George's, and St. Mary's counties reporting to ESSENCE

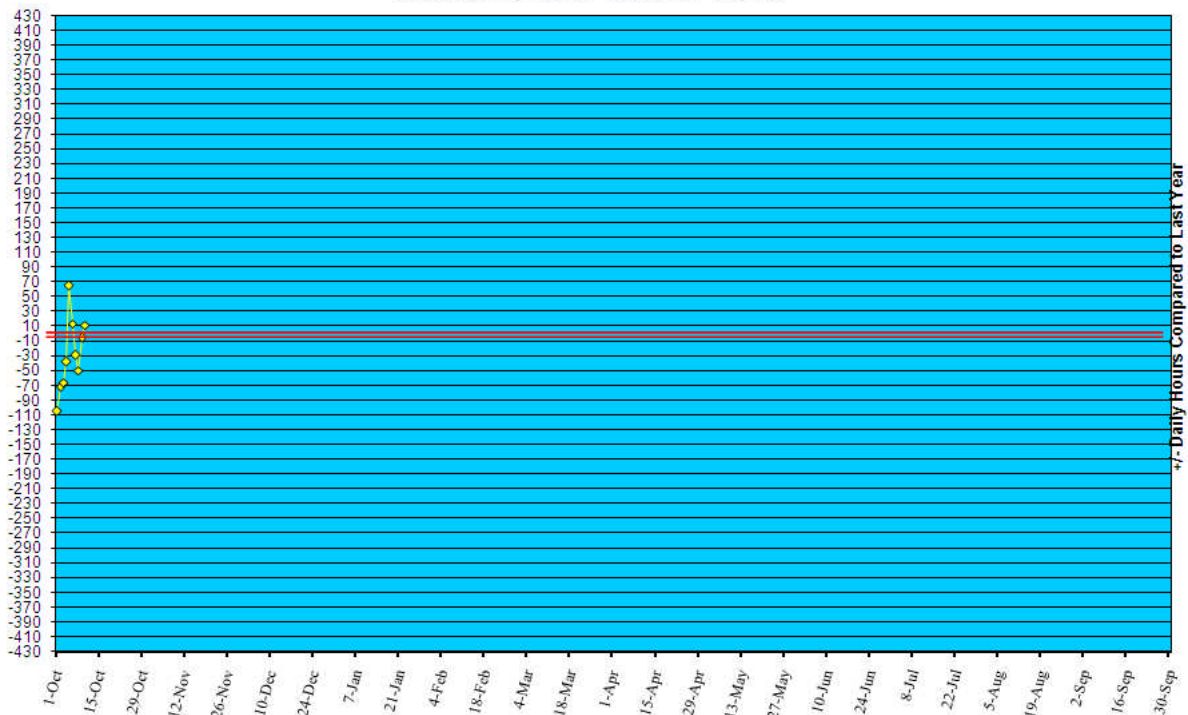
BALTIMORE CITY SYNDROMIC SURVEILLANCE PROJECT: No suspicious patterns in the medic calls, ED Syndromic Surveillance and the animal carcass surveillance. Graphical representation is provided for animal carcass surveillance 311 data.



REVIEW OF EMERGENCY DEPARTMENT UTILIZATION

YELLOW ALERT TIMES (ED DIVERSION): The reporting period begins 10/01/09.

Statewide Yellow Alert Comparison Daily Historical Deviations October 1, '09 to October 10, '09



REVIEW OF MORTALITY REPORTS

Office of the Chief Medical Examiner: OCME reports no suspicious deaths related to BT for the week.

MARYLAND TOXIDROMIC SURVEILLANCE

Poison Control Surveillance Monthly Update: Investigations of the outliers and alerts observed by the Maryland Poison Center and National Capital Poison Center in September 2009 did not identify any cases of possible terrorism events.

REVIEW OF MARYLAND DISEASE SURVEILLANCE FINDINGS

COMMUNICABLE DISEASE SURVEILLANCE CASE REPORTS (confirmed, probable and suspect):

Meningitis:	<u>Aseptic</u>	<u>Meningococcal</u>
New cases (Oct 04- Oct 10, 2009):	11	0
Prior week (Sep 27- Oct 03, 2009):	20	0
Week#40, 2008 (Sep 27- Oct 04, 2008):	21	0

OUTBREAKS: 14 outbreaks were reported to DHMH during MMWR Week 40 (October 4- 10, 2009)

1 Gastroenteritis outbreak

1 outbreak of E. coli O157 associated with an unknown exposure

13 Respiratory illness outbreaks

12 outbreaks of ILI associated with Schools

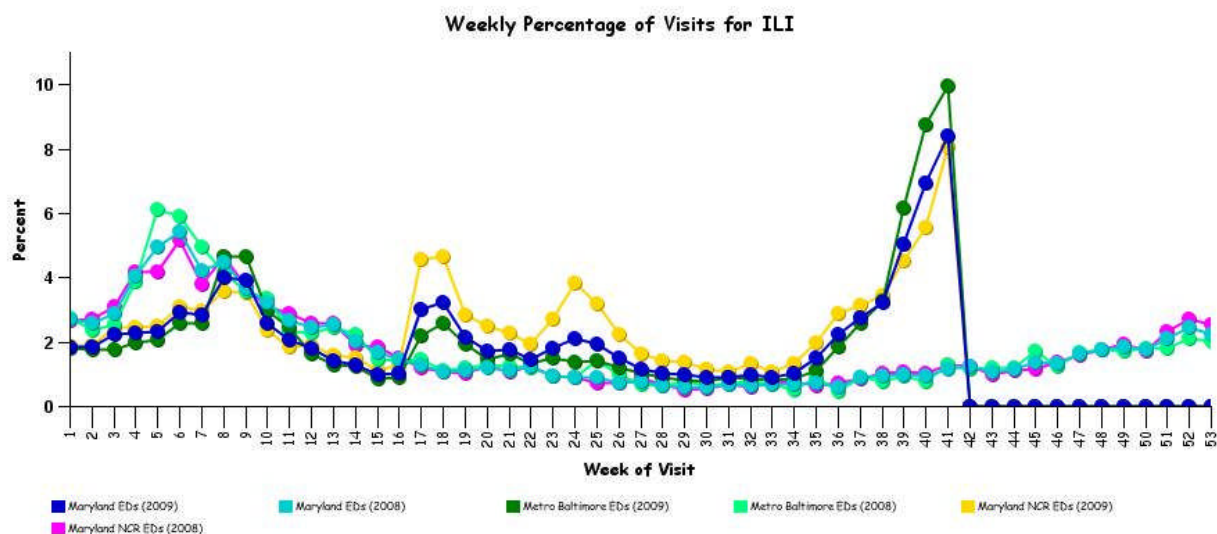
1 outbreak of INFLUENZA associated with a School

MARYLAND INFLUENZA STATUS: Influenza activity in Maryland for Week 40 is WIDESPREAD.

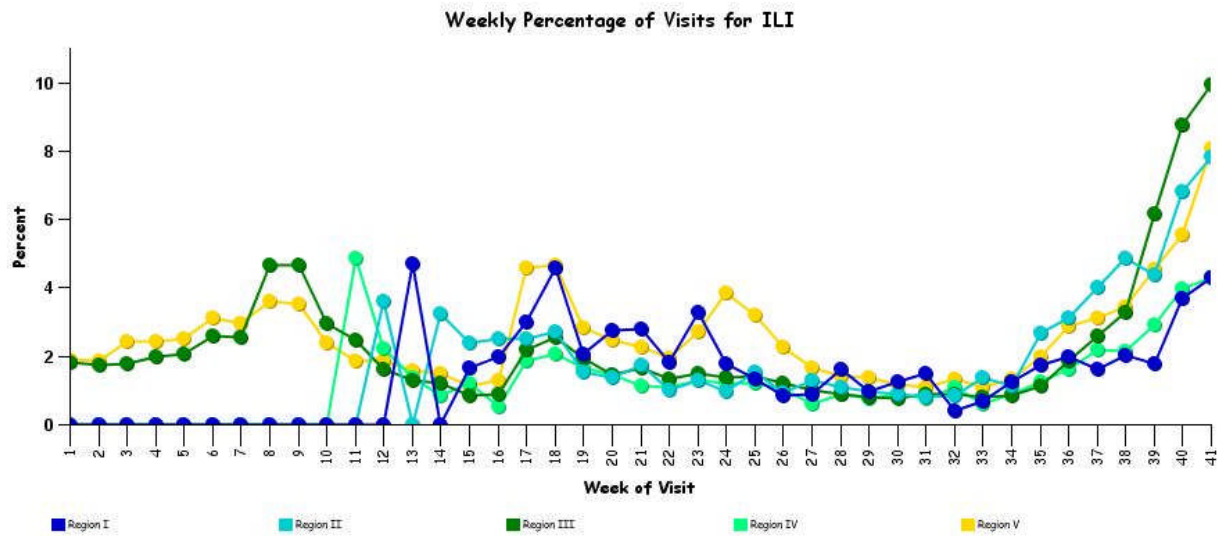
SYNDROMIC SURVEILLANCE FOR INFLUENZA-LIKE ILLNESS

Graphs show the percentage of total weekly Emergency Department patient chief complaints that have one or more ICD9 codes representing provider diagnoses of influenza-like illness. These graphs do not represent confirmed influenza.

Graphs show proportion of total weekly cases seen in a particular syndrome/subsyndrome over the total number of cases seen. Weeks run Sunday through Saturday and the last week shown may be artificially high or low depending on how much data is available for the week.



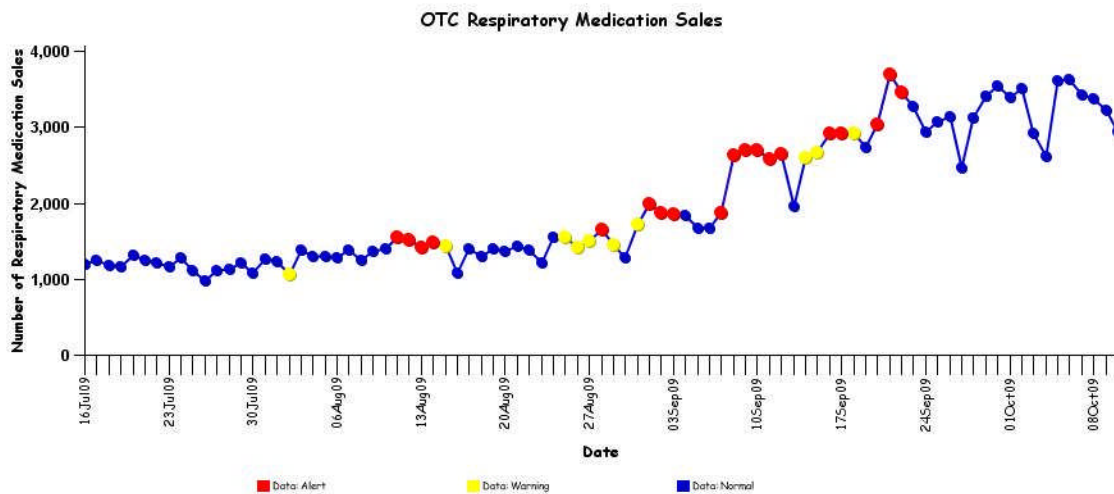
* Includes 2008 and 2009 Maryland ED visits for ILI in Metro Baltimore (Region 3), Maryland NCR (Region 5), and Maryland Total



*Includes 2009 Maryland ED visits for ILI in Region 1, 2, 3, 4, and 5
 2009 data for these regions are depicted separately to establish baselines, due to the addition of new hospitals in these regions.

OVER-THE-COUNTER (OTC) SALES FOR RESPIRATORY MEDICATIONS:

Graph shows the daily number of over-the-counter respiratory medication sales in Maryland at a large pharmacy chain.



PANDEMIC INFLUENZA UPDATE:

WHO Pandemic Influenza Phase: Phase 6: Characterized by community level outbreaks in at least one other country in a different WHO region in addition to the criteria defined in Phase 5. Designation of this phase will indicate that a global pandemic is under way. Definition of Phase 5 is characterized by human-to-human spread of the virus into at least two countries in one WHO region. While most countries will not be affected at this stage, the declaration of Phase 5 is a strong signal that a pandemic is imminent and that the time to finalize the organization, communication, and implementation of the planned mitigation measures is short.

US Pandemic Influenza Stage: Stage 0: New domestic animal outbreak in at-risk country

****More information regarding WHO Pandemic Influenza Phase and US Pandemic Influenza Stage can be found at:**
[http://preparedness.dhmmh.maryland.gov/Docs/PandemicInfluenza/PandemicInfluenzaResponseAnnex\(Vers7.2\).pdf](http://preparedness.dhmmh.maryland.gov/Docs/PandemicInfluenza/PandemicInfluenzaResponseAnnex(Vers7.2).pdf)

AVIAN INFLUENZA-RELATED REPORTS:

WHO update: As of September 24, 2009, the WHO-confirmed global total of human cases of H5N1 avian influenza virus infection stands at 442, of which 262 have been fatal. Thus, the case fatality rate for human H5N1 is about 60%.

AVIAN INFLUENZA, HUMAN, SUSPECTED, (INDONESIA): 05 Oct 2009, Bali Husbandry Agency head I.B. Alit stated that avian flu was still present on the island of Bali, mostly among domesticated fowl. In addition, a pregnant woman from Gianyar Regency is being treated at Sanglah Hospital for avian flu [avian influenza A(H5N1) virus infection]. Her unborn baby was dead.

H1N1 INFLUENZA (Swine Flu):

INFLUENZA PANDEMIC (H1N1), UPDATE: 09 Oct 2009, A genetic mutation of influenza pandemic (H1N1) 2009 virus [swine flu] that is resistant to the antiviral drug Tamiflu has been detected in a Japanese teenager who had not previously been treated with the drug, a Japanese health official said. This case could mark Japan's 1st instance of person-to-person transmission of a Tamiflu-resistant strain of the pandemic (H1N1) 2009 virus, but Health Ministry official Takeshi Enami said there was still insufficient evidence to confirm that. "We cannot deny that this could be person-to-person transmission, but we are not able to reach that conclusion," Enami said. Japan has had 8 cases of [pandemic (H1N1) 2009] infected patients who were resistant to Tamiflu, he added. The Geneva-based World Health Organization (WHO) said in late September [2009] that drug-resistant pandemic flu viruses had appeared infrequently and there was no evidence that they were spreading, but that further cases were likely. The mutation was detected by health officials in Sapporo, northern Japan, in a teenage girl who had developed a fever on 22 Aug 2009. She was given GlaxoSmithKline's Relenza and recovered a day later, the ministry said in a statement. The detected mutation did not worsen the virus, nor were there signs of an unusual rise in new H1N1 cases nearby, it said. The risk of resistance is higher in patients who suffer from weak immune systems and have already been treated with Tamiflu, (manufactured by Roche Holding under license from Gilead Sciences). It is also high in people who are treated with antivirals as a precaution after exposure to someone with influenza but nevertheless develop the disease.

INFLUENZA PANDEMIC (H1N1), UPDATE ON VACCINATION IN CANADA: 05 Oct 2009, International influenza vaccine experts are apparently not convinced that Canadian researchers have found a true link between getting a seasonal flu shot and catching swine flu. The consensus that emerged from a World Health Organization (WHO) teleconference Friday [2 Oct 2009] on the controversial data seemed to be that the Canadian findings are likely due to some confounding factor or factors in the data themselves and may not reflect a real increased risk, according to a WHO official who helped pull together the meeting. "From a WHO point of view, the fact that the findings are not replicated in other countries I think is reassuring for us that this is an outlier, if you like, the unexpected findings that are coming out of Canada," said David Wood, coordinator of the quality, safety, and standards team of WHO's department of immunization, vaccines, and biologicals. "Most people are still looking at this as some sort of undetected confounding in the data that for some reason is giving the results that are there." In an interview from Geneva, Wood was diplomatic. But when pressed, he did admit most experts on the call didn't seem to believe that the unpublished study, based on data from British Columbia, Quebec, and Ontario, had found a true link between getting a seasonal flu vaccine and having an increased risk of coming down with a mild case of H1N1 flu. "Well, yeah," he said. "It's a totally unexpected finding." "So I think people do then try to think: 'Well, why is this happening? Are there some effects that are just not being detected that are really behind this?' Because it is an unexpected finding. That's the way people tend to think." The work, which is [reportedly] being considered for publication by a medical journal, contributed to decisions by most provinces and territories to stagger or delay their seasonal flu shot efforts this fall [2009]. Instead of launching full-fledged seasonal flu vaccine programs in October [2009], most have announced they will offer seasonal shots in October only to seniors -- who aren't currently at high risk from the pandemic H1N1 virus -- and residents of long-term care facilities. After pandemic vaccination efforts are completed, most of those provinces plan to offer seasonal vaccine more broadly. A couple of jurisdictions -- Quebec and Nunavut -- will wait until after they've completed their pandemic vaccination efforts before offering seasonal flu shots. At the other end of the spectrum, New Brunswick is going ahead with its regular seasonal flu shot campaign before offering pandemic flu shots. The Canadian findings, which are reportedly mirrored in data from Manitoba as well, suggest that people who got a flu shot last fall [2008] were twice as likely as people who didn't to contract swine flu. But the association, if it is real, is to mild disease. There is no evidence that people who got seasonal flu shots are more prone to develop severe illness if they catch the new H1N1 virus. Scientists from the United States,

Britain, and Australia have looked at their data but didn't see the same effect. A number of scientists have speculated that the Canadian data may have some built-in confounders -- factors that can produce false results. For instance, if people who get flu shots are also more likely to seek a diagnosis of swine flu if they get sick that could make it seem like more of them got the illness when in fact what happened is that more of their illnesses were recorded.

Resources:

<http://www.cdc.gov/h1n1flu/>

<http://www.dhmd.maryland.gov/swineflu/>

NATIONAL DISEASE REPORTS

No new disease outbreaks related to CDC Critical Biological Agents were reported for MMWR week 40.

INTERNATIONAL DISEASE REPORTS

JAPANESE ENCEPHALITIS (INDIA): 10 Oct 2009, With 4 deaths, the toll of Japanese encephalitis [virus; JEV] victims has now been raised to 379 in the northern Indian state of Uttar Pradesh, a senior Indian Health official said Saturday. "A total of 2182 patients suffering from the deadly vector-borne disease were admitted to Baba Raghav Das Medical College in the recent past in Gorakhpur in the eastern part of the state. According to latest reports, 379 patients have died so far this year. The conditions of some patients are also serious and the toll may mount," the official said. (Viral Encephalitis is listed in Category B on the CDC list of Critical Biological Agents) *Non-suspect case

CHIKUNGUNYA (INDONESIA): 08 Oct 2009, Hundreds of residents from 18 villages and subdistricts in the Southeast District Padang Sidempuan [North Sumatra] have been attacked by suspected chikungunya disease. Analysis of information gathered Wednesday (7 Oct 2009), showed the disease was spreading weekly in densely populated areas, and every day there were people who were attacked [by the virus]. According to one local resident, almost the whole community in the area already has been affected by the chikungunya outbreak. The initial symptoms include fever experienced by residents, headache accompanied by high fever, chills and they did not want to eat. One day post-infection [post onset of symptoms], the patient's skin develops visible spots that are very itchy. Every citizen who develops the disease could not move or walk and was lame. The [people] suspected of having chikungunya disease included adults and children. Admittedly, until now residents who are affected by chikungunya just check into one of the doctors who practice in the region. "Every day the doctor's office was filled with patients who sought treatment for a disease having characteristics similar to chikungunya [virus infection]," a resident of the area said. (Emerging Infectious Diseases are listed in Category C on the CDC list of Critical Biological Agents) *Non-suspect case

EBOLA HEMORRHAGIC FEVER, SUSPECTED (SUDAN): 08 Oct 2009, A mysterious haemorrhagic disease suspected to be [Ebola haemorrhagic fever] has killed at least 23 people and infected dozens more in Sudan's under-developed south, a Southern Sudanese army official said on Wednesday [7 Oct 2009]. The World Health Organisation says Ebola haemorrhagic fever, one of the most virulent viral diseases known to mankind, was discovered in South Sudan and the neighbouring Democratic Republic of Congo in 1976. Some strains [of ebolavirus] have a death rate of 25 to 90 percent. Kuol Diem Kuol, spokesman for the South Sudan army (SPLA) said blood samples had been sent to laboratories for testing but that doctors suspected [the disease was Ebola haemorrhagic fever]. "So far there have been 20 deaths in the SPLA and in addition 3 wives of soldiers have died, he told Reuters. There is a huge number of the [general] population affected also, but we don't have the (exact) number," he added. A UN official in South Sudan said they had attempted an assessment but needed more information from local government to be able to evaluate the situation. Kuol said symptoms included vomiting blood and bleeding from the ears and nose, adding it was very widespread in the West Bahr-al-Ghazal state. A 2004 outbreak of Ebola haemorrhagic fever killed 7 people in the south. Death rates in Sudan averaged around 50 percent of victims. Health officials say there is still no known cure for the disease, which is spread through bodily fluids, including blood. South Sudan, emerging from decades of civil war, has little health infrastructure and few medical staff. (Viral Hemorrhagic Fever is listed in Category A on the CDC list of Critical Biological Agents) *Non-suspect case

OTHER RESOURCES AND ARTICLES OF INTEREST

More information concerning Public Health and Emergency Preparedness can be found at the Office of Preparedness and Response website: <http://preparedness.dhmd.maryland.gov/>

Maryland's Resident Influenza Tracking System: www.tinyurl.com/flu-enroll

Influenza Vaccination Coverage Among Children and Adults --- United States, 2008--09 Influenza Season

MMWR. October 9, 2009 / 58(39);1091-1095. This report summarizes the results of the analysis, which indicated that reported influenza vaccination coverage of ≥ 1 doses was 40.9% for ages 6--23 months, 32.0% for 2--4 years, and 20.8% for 5--17 years. Among adults, reported coverage was 32.1% for persons aged 18--49 years with high-risk conditions, 42.3% for persons 50-

-64 years, and 67.2% for persons ≥ 65 years. These results are consistent with previous studies that have found no significant increases in vaccination coverage for any of these age groups over previous seasons. These 2008--09 season estimates provide a baseline for assessing implementation of the 2008 recommendation for school-aged children. Attaining higher coverage rates likely will require additional vaccination programs in schools and expanded vaccination services in provider offices.

<http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5839a1.htm>

NOTE: This weekly review is a compilation of data from various surveillance systems, interpreted with a focus on a potential BT event. It is not meant to be inclusive of all epidemiology data available, nor is it meant to imply that every activity reported is a definitive BT event. International reports of outbreaks due to organisms on the CDC Critical Biological Agent list will also be reported. While not "secure", please handle this information in a professional manner. Please feel free to distribute within your organization, as you feel appropriate, to other professional staff involved in emergency preparedness and infection control.

For questions about the content of this review or if you have received this and do not wish to receive these weekly notices, please e-mail me. If you have information that is pertinent to this notification process, please send it to me to be included in the routine report.

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